678US

Serial No.: 10/551,583

Filed: September 29, 2005

Page : 2 of 10

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-10. (Cancelled).

11. (New) A sheet paper identification device that images an image of sheet paper by means of an image pickup section located on a feed path for the sheet paper and identifies the sheet paper on the basis of image data of the sheet paper thus imaged and acquired, comprising:

image data acquisition means for acquiring sheet-paper-absent image data imaged and acquired by the image pickup section in a state where sheet paper has not yet arrived at the image pickup section and there is no sheet paper, and sheet-paper-present image data imaged and acquired in a state where sheet paper has arrived at the image pickup section and there is the sheet paper;

measurement means for measuring a position and area of an image in the sheetpaper-absent image data acquired by the image data acquisition means;

unwanted image discrimination means for discriminating an image that exists in the sheet-paper-present image data in the same position and over the same area as the image in the sheet-paper-absent image data measured by the measurement means as an unwanted image; and

sheet paper identification means for attaching the unwanted image discriminated by the unwanted image discrimination means to standard data found beforehand from genuine sheet paper in the same position and over the same area as the unwanted image, and identifying the authenticity of the sheet paper by comparing the standard data to which the unwanted image is attached with the sheet-paper-present image data.

678US

Serial No.: 10/551,583

Filed: September 29, 2005

Page : 3 of 10

12. (New) The sheet paper identification device according to claim 11, wherein the unwanted image discrimination means binarizes the sheet-paper-absent image data and the sheet-paper-present image data that are acquired by the image data acquisition means, and identifies the image existing in the binarized sheet-paper-present image data in the same position and over the same area as the image in the sheet-paper-absent image data as the unwanted image.

- 13. (New) The sheet paper identification device according to claim 11, wherein the sheet paper identification means identifies the sheet paper on the basis of the sheet-paper-present image data acquired by the image data acquisition means in a case where the total area of the unwanted image discriminated by the unwanted image discrimination means is within a predetermined value.
- 14. (New) The sheet paper identification device according to claim 12, wherein the sheet paper identification means identifies the sheet paper on the basis of the sheet-paper-present image data acquired by the image data acquisition means in a case where the total area of the unwanted image discriminated by the unwanted image discrimination means is within a predetermined value.
- 15. (New) A sheet paper identification method that images an image of sheet paper by means of an image pickup section located on a feed path for the sheet paper and identifies the sheet paper on the basis of image data of the paper sheet thus imaged and acquired, comprising:

acquiring, by image data acquisition means, sheet-paper-absent image data imaged and acquired by the image pickup section in a state where sheet paper has not yet arrived at the image pickup section and there is no sheet paper, and sheet-paper-present image data imaged and acquired in a state where sheet paper has arrived at the image pickup section and there is the sheet paper;

678US

Serial No.: 10/551,583

Filed: September 29, 2005

Page : 4 of 10

measuring, by measurement means, a position and area of an image in the sheet-paper-absent image data acquired by the image data acquisition means;

discriminating, by unwanted image discrimination means, an image that exists in the sheet-paper-present image data in the same position and over the same area as the image in the sheet-paper-absent image data measured by the measurement means as an unwanted image; and

attaching, by sheet paper identification means, the unwanted image discriminated by the unwanted image discrimination means to standard data found beforehand from genuine sheet paper in the same position and over the same area as the unwanted image, and identifying the authenticity of the sheet paper by comparing the standard data to which the unwanted image is attached with the sheet-paper-present image data.

- 16. (New) The sheet paper identification method according to claim 15, wherein the unwanted image discrimination means binarizes the sheet-paper-absent image data and the sheet-paper-present image data that are acquired by the image data acquisition means, and identifies the image existing in the binarized sheet-paper-present image data in the same position and over the same area as the image in the sheet-paper-absent image data as the unwanted image.
- 17. (New) The sheet paper identification method according to claim 15, wherein the sheet paper identification means identifies the sheet paper on the basis of the sheet-paper-present image data acquired by the image data acquisition means in a case where the total area of the unwanted image discriminated by the unwanted image discrimination means is within a predetermined value.
- 18. (New) The sheet paper identification method according to claim 16, wherein the sheet paper identification means identifies the sheet paper on the basis of the sheet-paper-present image data acquired by the image data acquisition means in a case where the

678US

Serial No.: 10/551,583

Filed: September 29, 2005

Page : 5 of 10

total area of the unwanted image discriminated by the unwanted image discrimination means is within a predetermined value.